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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/618,046 | 07/11/2003 | Dai-You Lin | 3559DYL-4 | 4114 |
| 22442 : 7590 05/26/2004 SHERIDAN ROSS PC 1560 BROADWAY SUITE 1200 DENVER, CO 80202 | | | EXAMINER RINEHART, KENNETH | |
| | | | ART UNIT 3749 | PAPER NUMBER |

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,046

Applicant(s)

LIN, DAI-YOU

Examiner

Kenneth B Rinehart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6 and 7 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Boswell. Boswell shows a furnace that defines a combustion chamber therein (fig. 1); a feed supply adapted for containing the solid wastes therein (17, fig. 1); a feed-delivering conduit connected to said feed supply and said furnace so as to permit delivery of the solid wastes into said combustion chamber (100h, fig. 1); an air supply connected to said furnace for supplying air into said combustion chamber (33, 34, fig. 1); and an air distributor that is disposed in said combustion chamber, that is connected to said air supply, and that has an elongated segment which extends in a longitudinal direction the same as a flow direction of combustion gases said combustion chamber (24, 26, fig. 1), and which is formed with a plurality spaced apart holes distributed along said longitudinal direction, each of said holes opening in a transverse direction relative to said longitudinal direction so as to permit uniform distribution of air into said combustion chamber (fig. 1), wherein said air supply includes an air blower, and an air conduit connected to said air blower and said furnace (33, 34, fig. 1).

Claims 1, 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamrick.

Hamrick shows a furnace that defines a combustion chamber therein (fig. 1a); a feed supply adapted for containing the solid wastes therein (12, fig. 1a); a feed-delivering conduit connected

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to said feed supply and said furnace so as to permit delivery of the solid wastes into said combustion chamber (20, fig. 1a); an air supply connected to said furnace for supplying air into said combustion chamber (86, fig. 1a); and an air distributor that is disposed in said combustion chamber, that is connected to said air supply, and that has an elongated segment which extends in a longitudinal direction the same as a flow direction of combustion gases said combustion chamber (62, fig. 1a), and which is formed with a plurality spaced apart holes distributed along said longitudinal direction, each of said holes opening in a transverse direction relative to said longitudinal direction so as to permit uniform distribution of air into said combustion chamber (see arrows, fig. 1a), wherein said air supply includes an air blower, and an air conduit connected to said air blower and said furnace (86, 84, fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boswell. Boswell discloses a furnace that defines a combustion chamber therein (fig. 1); a feed supply adapted for containing the solid wastes therein (17, fig. 1); a feed-delivering conduit connected to said feed supply and said furnace so as to permit delivery of the solid wastes into said combustion chamber (100h, fig. 1); an air supply connected to said furnace for supplying air into said combustion chamber (33, 34, fig. 1); and an air distributor that is disposed in said combustion chamber, that is connected to said air supply, and that has an elongated segment

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which extends in a longitudinal direction the same as a flow direction of combustion gases said combustion chamber (24, 26, fig. 1), and which is formed with a plurality spaced apart holes distributed along said longitudinal direction, each of said holes opening in a transverse direction relative to said longitudinal direction so as to permit uniform distribution of air into said combustion chamber (fig. 1), wherein said air supply includes an air blower, and an air conduit connected to said air blower and said furnace (33, 34, fig. 1), and further has a transverse segment that extends from said elongated segment in said transverse direction and that is connected to said air conduit (24, fig. 1), said air supply includes a first air blower, ..., and further having a transverse segment that extends from said elongated segment in said transverse direction and that is connected to said first air blower (fig. 24, fig. 1), said air supply further includes a ... air blower and an air conduit that is connected said furnace and said ... air blower (33, fig. 1). Boswell discloses applicant's invention substantially as claimed with the exception of said air distributor is in the form of an L-shaped pipe, second. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have L shaped because applicant ahs not disclosed that the shape of air distributor provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the shape of Boswell or the claimed shape because both shapes perform the same function of supplying air equally well. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have second because applicant ahs not disclosed that the number of air blowers provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have

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expected Applicant's invention to perform equally well with either the number of air blowers of Boswell or the claimed number because both quantities perform the same function of supplying air equally well.

Claims 3, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamrick. Hamrick discloses a furnace that defines a combustion chamber therein (fig. 1a); a feed supply adapted for containing the solid wastes therein (12, fig. 1a); a feed-delivering conduit connected to said feed supply and said furnace so as to permit delivery of the solid wastes into said combustion chamber (20, fig. 1a); an air supply connected to said furnace for supplying air into said combustion chamber (86, fig. 1a); and an air distributor that is disposed in said combustion chamber, that is connected to said air supply, and that has an elongated segment which extends in a longitudinal direction the same as a flow direction of combustion gases said combustion chamber (62, fig. 1a), and which is formed with a plurality spaced apart holes distributed along said longitudinal direction, each of said holes opening in a transverse direction relative to said longitudinal direction so as to permit uniform distribution of air into said combustion chamber (see arrows, fig. 1a), wherein said air supply includes an air blower, and an air conduit connected to said air blower and said furnace (86, 84, fig. 1). and further has a transverse segment that extends from said elongated segment in said transverse direction and that is connected to said air conduit (above item 65, fig. 1a), said air supply includes a first air blower, ..., and further having a transverse segment that extends from said elongated segment in said transverse direction and that is connected to said first air blower (above item 65, fig. 1), said air supply further includes a ... air blower and an air conduit that is connected said furnace and said ... air blower (86, fig. 1). Hamrick discloses applicant's invention substantially as claimed

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with the exception of said air distributor is in the form of an L-shaped pipe, second. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have L shaped because applicant has not disclosed that the shape of air distributor provides an advantage, is used for a particular purpose or solves a stated problem.

One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the shape of Hamrick or the claimed shape because both shapes perform the same function of supplying air equally well. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have second because applicant has not disclosed that the number of air blowers provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the number of air blowers of Hamrick or the claimed number because both quantities perform the same function of supplying air equally well.

Allowable Subject Matter

Claims 4, 5, 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to ... in general: Hoskinson (4674417), Kener (1545497), Booth et al (5156097). Any inquiry concerning this communication or earlier communications from the examiner should be directed

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to Kenneth B Rinehart whose telephone number is 703-308-1722. The examiner can normally be reached on 7:30 -4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703-308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBR


KENNETH RINEHART
PRIMARY EXAMINER